

# RECLAMATION

*Managing Water in the West*

**Reclamation  
Information Technology/  
Electronic Government Strategic Plan  
FY 2006 - 2010**

**March 2006, Version 1.0  
Chief Information Office**



U.S. Department of the Interior  
Bureau of Reclamation

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### List of Key Acronyms:

Chief Information Office (CIO)  
Chief Information Officer's Council (CIOC)  
Department of the Interior (DOI)  
Electronic Government (E-Government)  
Enterprise Architecture (EA)  
Federal Enterprise Architecture (FEA)  
Information Technology (IT)  
Investment Review Board (IRB)  
Office of Management and Budget (OMB)  
President's Management Agenda (PMA)  
Program Assessment Rating Tool (PART)

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## ***Message from Reclamation's Chief Information Officer (February 2006)***

*The Chief Information Office remains committed to supporting Reclamation's core mission of effectively and efficiently delivering water and generating power. With supporting the core mission in mind, the CIO represents a range of organizations and interests as well as supporting a wide array of IT goals, programs, and initiatives established by federal legislation, the Department of the Interior, and the Office of Management and Budget (OMB). Balancing and supporting somewhat diverse and divergent interests, programs, and initiatives while supporting Reclamation's core mission will continue to be a challenging and complicated undertaking. However, with the support of the Chief Information Officer's Council (CIOC), the Chief Information Officer believes that Reclamation's core mission requirements and interests can be supported by IT goals, programs, and initiatives as well as by IT projects sponsored or mandated by other organizations. Through strategic planning, the CIO plans to modernize mission and business operations and systems, improve the delivery of IT services internally and externally, develop common IT solutions, provide secure technologies and information management services, and create efficiencies through innovative uses of information and technology across the organization.*

*Over the years, Reclamation has made many advances in the area of information technology and Electronic Government (E-Government), and it is the desire of the Chief Information Officer that Reclamation continue to build upon these successes in the areas of IT security, capital planning and investment control, enterprise architecture, project management, information management, and infrastructure and telecommunications management. The attached Information Technology and Electronic Government Strategic Plan for Fiscal Years 2006-2010 provides a roadmap for making greater improvements in Reclamation's IT Program while supporting near-and long-term Reclamation-wide goals aimed at delivering water and power in more effective and efficient manner over the next 5 years.*

***Randy Feuerstein,  
Chief Information Officer***

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## Planning Principles

The IT and E-Government Strategic Plan for Fiscal Years 2006-2010 aligns Reclamation's mission and business goals with several IT program goals and provides a strategy for accomplishing IT goals and objectives prescribed by the Department of the Interior (DOI) in support of the President's Management Agenda (PMA) and Electronic Government (E-Government). Developing this plan has been difficult because of the range, number, and diversity of IT goals, objectives, performance measures, and initiatives established by the Department and the Office of Management and Budget (OMB) for E-Government and as part of the PMA. However, by applying some basic principles, Reclamation identified several key goals that not only directly or indirectly support mission goals and objectives but the array of IT goals, performance measures, and initiatives established by the Department and OMB. These key principles include:

- **Balancing Needs** - IT management goals, objectives, and decisions will be balanced with bureau-level resources, technologies, and mission and business needs;
- **Applying Sound IT Practices** - Sound IT business practices will be instituted and applied to ensure system and business process improvements are made and to enhance security over IT assets;
- **Expecting Results** - IT investments and initiatives will be results-oriented and linked to mission and business goals that support internal and external customer needs;
- **Minimizing Risks/Maximizing Returns** - IT risks will be minimized and returns or benefits will be maximized; and,
- **Leveraging IT Opportunities** - Externally mandated IT and E-Government initiatives will be managed in a cost effective and efficient manner as well as leveraged as much as possible at the bureau-level to ensure technical compatibility and cost savings.

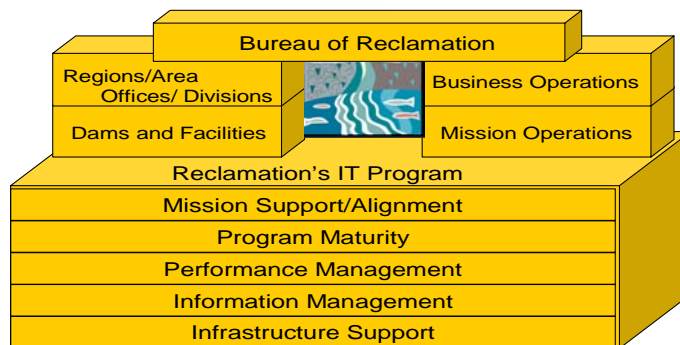
The Chief Information Office (CIO), with the assistance of the Chief Information Officer's Council (CIOC), applied these principles while developing this document and will continue to apply these principles to ensure that Reclamation's IT and E-Government Strategic Plan is utilized and lead to improvements in IT services through the elimination or consolidation of duplicative systems or services, reductions in service costs, enhancements in mission or business operations and IT capabilities, and improvements in mission or business performance and citizen-centered services. The CIO and CIOC also will continue to apply these principles when assessing the performance of Reclamation's IT Program, making changes to the IT Program, and rendering IT investment recommendations. (For information on the CIO governance structure, see Appendix V.)

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## I. Reclamation IT and E-Government Strategic Goals

Building on Reclamation's corporate-wide and strategic planning framework, the Chief Information Office identified several key goals for the IT Program. These goals support Reclamation's corporate-wide priorities as well as directly or indirectly support higher level IT goals and performance measures established by the Department and for E-Government. More importantly, the goals provide a framework for improving and transforming Reclamation's IT program and if implemented and achieved, likely will enable the organization to meet ongoing and future mission challenges in a more effective and cost efficient manner. Reclamation's IT Program goals fall within five key areas: (1) *IT Infrastructure Support*; (2) *Information Management*; (3) *Performance Management*; (4) *Program Maturity*; and, (5) *Mission Support/Alignment*.

**Figure 1.1 : Key Areas Within Reclamation's IT Program**



The following summarizes information on the *five* areas within Reclamation's IT Program and key goals; linkages to other IT or mission-related goals; strategic objectives associated with the IT goals; steps needed to achieve the goals and strategic objectives; and measures to assess progress within these areas.

***Infrastructure Support - Goal 1: Provide an IT infrastructure that supports common and reliable communications and computer capabilities for mission and business-essential programs and operations as well as promotes service improvements and cost savings***

### ***Linkages to Other Goals:***

Goal (1) supports goals and objectives in *Interior's Strategic Plan for FY 2004-2008* and within the *Resource Use* area as well as goals in *Interior's E-Government Strategy for FY*



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2004-200, which are aimed at using technology to enhance public benefit, promote responsible resource use, and ensure optimal value of water-related resources. Goal (1) also aligns with goals and objectives outlined in Interior's *IT and Business Enterprise Plan FY 2005-2008*. Goals and objectives in these documents include: consolidating technology and centralizing the management of wide area networks through the Enterprise Services Network; consolidating e-mail services as part of the Enterprise Messaging System effort; centralizing and improving access control system management through Active Directory, Public Key Infrastructure, and e-Authentication implementation; consolidating web management through the use of enterprise centers; consolidating help desk servicing and contracting activities and promoting the use of Enterprise Systems Administration to manage desktop and other services; utilizing new services, such as Internet Protocol Version 6 (IPv6), Voice over Internet Protocol (VOIP), Radio over Internet Protocol (ROIP), and Wireless services, to better manage communications across the organization; and ensuring a stable, reliable and robust technical infrastructure is established and aligned with the architecture and capable of successfully supporting E-Government initiatives.

Goal (1) further aligns with objectives mandated by the PMA and Interior's E-Government Scorecard, which are aimed at promoting the development and deployment of enterprise-wide and government-wide systems that consolidate infrastructure and business processes through the use of fewer and more uniform or common systems and technologies based on business lines. At the Reclamation-level, goal (1) supports corporate priorities to develop and deploy common and more consistent systems and platforms to support mission-and business-related functions and operations, which likely will result in more effective and consistent solutions and reduced costs for stakeholders, as recommended by the National Academy of Sciences<sup>1</sup>(NAS).

***Strategic Objectives:***

- 1.1 Consolidate IT infrastructure systems and communications capabilities to the extent practicable and leverage opportunities to improve IT capabilities, business practices or cost savings in regions, area offices, and across the network to the extent possible.
- 1.2 Leverage mandated IT infrastructure investments to the extent practicable and look for opportunities to streamline operations and enhance business practices where appropriate. This includes but is not limited to conducting server and platform evaluations and consolidating and upgrading server platforms and other systems to reduce costs and servicing requirements within IT operations.
- 1.3 Increase customer awareness of IT resources and capabilities within IT Operations and promote customer service through the use of standard business practices and online tools and other IT services.
- 1.4 Leverage enterprise licensing agreements and other acquisition and licensing mechanisms to the extent practicable and look for opportunities to mitigate the risks of unexpected costs and unused licenses as well as any cost savings or avoidance opportunities.

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<sup>1</sup> *Managing Construction and Infrastructure in the 21<sup>st</sup> Century Bureau of Reclamation*, National Research Council of the National Academies.

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***Steps to Achieving Goal and Strategic Objectives:***

- An Active Directory infrastructure is being implemented to enable consistent and centralized network management, reduce or consolidate server management activities, improve web-server hosting, standardized naming conventions for simplified management of network resources, and development and support of enterprise-wide standards, services, and economies of scale through the encouragement of consolidated or enterprise-wide service centers/contracts.
- Implement the Enterprise Services Network, Electronic Messaging System, and other mandated department-wide IT infrastructure initiatives to further consolidate and improve infrastructure and communications capabilities. While these initiatives may not generate near-term cost savings, look for opportunities to leverage these technologies to reduce servicing requirements and to re-allocate resources within Reclamation to improve IT services in other areas as well as communications and information sharing capabilities.
- Evaluate regional and area office infrastructure capabilities and identify any business practices and service areas that offer opportunities for cost savings or avoidance as well as improving existing capabilities associated with IT operations.
- Increase user awareness of IT operational services and tools by enhancing knowledge of help desk and other services support by the Chief Information Office. Develop informational and promotional materials to disseminate information to users and to better identify user needs.
- Investigate and deploy interactive and manual evaluation systems or processes to better identify and gauge IT infrastructure requirements as well as user needs, including but not limited to the extent to which hardware or software within aging platforms needs replacement, and the extent to which help desk services, web-based or online services, wireless services, and other technologies and IT tools are supported, utilized, and meet user needs as defined by satisfaction levels or ratings for selected services/systems/websites.
- Develop standard processes to identify, define, and track requests for system, application, database, and other communication services. Use the processes to address planning and funding issues associated with IT operations and to look for opportunities to streamline processes and minimize costs. In addition, use the information to identify any lessons learned and to develop future performance metrics.
- Develop strategies to evaluate licenses and other contractual arrangements associated with the management of Reclamation's IT infrastructure and look for opportunities to streamline business practices associated with these tasks and any

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opportunities for cost savings in licensing arrangements or other acquisition approaches.

***Measures of Progress:***

- **Deployment of Common and Reliable Services With Cost Savings -** Completion of mandated enterprise-wide IT infrastructure services or initiatives launched to consolidate servers or other systems used in support of the IT infrastructure and regional general support system structure as demonstrated by cost, schedule and performance metrics for individual projects, including but not limited to Enterprise Services Network, Electronic Messaging System, and Active Directory initiatives, as well as the completion of transition plans and use of enterprise-wide service centers and contracting mechanisms, demonstrating cost avoidances or other improvements. This includes the consolidation of servers to reduce maintenance tasks and costs, where appropriate.
- **Deployment of Needed Services -** The completion and implementation of transition plans for enterprise solutions and timely deployment of the solutions at regional and area office levels as well as business and other organizational units, with minimal disruption to existing infrastructure services.
- **Promotion of Needed Services -** The establishment of standard service request processes and utilization and other survey assessments to determine the extent to which IT infrastructure support and services are utilized or underutilize and the extent to which customers or users rely on IT services and are satisfied with such services, including but not limited to the use of help desk services, online websites, web tools, and other services. Use this information to establish baseline performance metrics and to make improvements in service areas as needed. The information also will be used to identify any opportunities to eliminate IT services based on customer input and utilization rates.

***Information Management - Goal 2: Enable information and knowledge sharing across the organization as well as common information and records management practices to facilitate the development and deployment of applications, tools, and services for information sharing***

***Linkages to Others Goals:***

Goal (2) aligns with goals and objectives in the Department's *E-Government Strategy* document. Within the *Manage Resource Use* area, goals are supported in the areas of enhancing public benefit, promoting responsible resource use, and ensuring optimal value of resources. Goal (2) also aligns with *E-Government Strategy* objectives to: consolidate web management through the use of enterprise centers; provide enterprise-based operations that improve the quality, access, and sharing of data; improve management and mission-related support capabilities, including payroll processes, financial analysis



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tools, and asset management tools; ensure that up-to-date, easy-to-use, and centralized tools and information are made available to users; improve operating efficiencies and effectiveness through internal information sharing and collaboration using data management, electronic records management, and other electronic tools; improve methods for tracking and incorporating geospatial information in appropriate Interior business solutions; provide an easy-to-access, consistent, useful, and accurate web presence; and ensure that advanced security measures, including electronic authentication, Internet security policies, and remote testing, are comprehensively developed, maintained, enforced and integrated in all aspects of E-Government applications for keeping information private and secure as appropriate.

Goal (2) further supports Reclamation's effort to improve IT capabilities to better support water management and recreational activities and to ensure that these capabilities are developed in ways that support 'seamless' interactions and communications with key partners, as prescribed by the NAS. Developing the tools and technologies to support information sharing with internal and external partners or stakeholders is very much in line with these corporate-level priorities.

***Strategic Objectives:***

- 2.1 Develop procedures and tools to more uniformly and efficiently manage Reclamation's web-enabled services, including providing a stable and secure environment to disseminate mission and business information to internal and external stakeholders; developing tools to standardize, secure, test, and improve the quality of web information; and implementing techniques to obtain customer input on web services.
- 2.2 Educate the user community about new IT initiatives and existing geospatial and other analytical tools to increase awareness, knowledge of technology capabilities, and other state-of-the-art tools and applications that may be used within the existing environment to enhance information sharing among employees and across the organization. Through outreach efforts, help executive and business system owners and IT managers better understand their roles and responsibilities in managing sensitive information (e.g., cultural resources, land records, personnel information, threatened and endangered species, etc.) essential to operations. Leverage these efforts to encourage data sharing and the use of common and collaborative data sets and tools and the implementation of IT security and privacy standards. Further, work with the end user community to identify opportunities to capture important and mission-related data, models, whitepapers, and other work for retention and to enhance knowledge sharing across the organization, especially in critical areas where succession plans may fall short (e.g., SCADA design and operation, engineering, etc.).
- 2.3 Encourage the user community to be involved in the process of identifying new technologies and tools for mission and business-related work by standardizing and integrating the IT investment proposal process within Reclamation and as part of a web-enabled environment to better capture ideas for business or mission improvements and costs.

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- 2.4 Develop modeling practices for improving data management, business data stewardship and collaboration, as well as to ensure data quality and to foster information sharing across the organization.
  - 2.5 Develop collaborative processes to regularly manage and monitor data sharing modeling and enterprise architecture-related initiatives to promote the utilization of common systems, application, and data sets and information sharing.

***Steps to Achieving Goal and Strategic Objectives:***

- Standardize web development, testing, and maintenance practices to better ensure Reclamation's web environment is uniform, customer-focused, and secure. Implement these procedures and look for opportunities to identify any problems or areas for improvement.
- Evaluate and utilize data modeling tools and other IT tools to create data sets and determine whether these models can be further improved to better leverage information sharing capabilities within the organization.
- Promote educational and outreach programs to enhance user awareness and knowledge of IT data management services and processes. Look for opportunities to establish collaborative data stewardship and sharing pilots or initiatives to foster data and information sharing across the organization.
- Standardize, integrate, and simplify IT investment and decision-making processes to minimize redundancies and ensure uniform oversight measures are applied regarding proposal to develop or purchase state-of-the art tools and for IT pilot projects.

***Measures of Progress:***

- **Utilization of Common Web-Supported Services** - The Chief Information Office and Office of Public Affairs will develop procedures for standardizing web development and testing practices and that promote the implementation of common web security measures. Procedures will be in line with applicable requirements, and conformance will be based on survey results that determine the extent to which web developers and content managers understand and follow procedures. In time, selected web sites will be examined to ensure compliance with procedures, with results provided to the Office of Public Affairs for follow-up action.
- **Utilization of Outreach and Educational Programs/Groups** - The Chief Information Office will conduct regular educational and outreach programs to enhance the awareness and knowledge of IT services, data and records management requirements, and other processes, including developing briefings, questionnaires, memos, brochures, videos, and online or web sites to disseminate information to customers and/or the public. This includes establishing collaborative data sharing user groups involving regions and area offices as needed.

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- **Development and Utilization of Standard IT Proposal Process** - The CIO will work with other leadership, oversight, and budget groups to standardize terminology and processes for initiating the development and piloting of IT initiatives or proposals for state-of-the-art tools to ensure uniform and simplified investment management practices are applied and communicated to the user community. This includes purchasing IT systems, tools, and other devices requiring significant funding and the use of common business requirement documents and tools.
  - **Application of Data Models and Identification of Common Data Sets**- The CIO will assess the extent to which progress has been made in applying data modeling tools and developing common data sets for mission-essential operations.

***Performance Management - Goal 3: Leverage opportunities to utilize Department-wide, E-Government, and Bureau initiatives to eliminate system redundancies and antiquated business practices for increased productivity and/or cost savings***

***Linkages to Other Goals:***

Goal (3) supports *Department IT and Business Enterprise* goals for E-Government and is aimed at improving the efficiency and effectiveness of business processes and leveraging enterprise architecture to improve mission performance and realize strategic goals and objectives. Objectives further supported by Goal (3) include: providing IT services that help the organization promote streamlined and standardized business processes through use of automated business rules and resource sharing and the alignment and implementation of technology with business strategy to improve mission performance, establish cross-business data sharing and integration and technology component reuse. The goal also supports another key objective to participate in architecture, planning, and/or IT investment management activities with other federal agencies and private industry to promote information sharing, to stay current with business and technology trends, and to facilitate the adoption of best practices that can improve results of the Interior's Enterprise Architecture (IEA) program on a continual basis.

As part of the Department's *E-Government Strategy*, goals and objectives supported by Goal (3) include: implementing E-Government strategies to improve the effectiveness of services, such as the use of technology to better manage resources to promote responsible use and sustain a dynamic economy; providing recreation opportunities for America; safeguarding lives, resources and property; advancing scientific knowledge; and improving the quality of life for communities, as well as employing E-Government solutions to achieve Department-wide management excellence goals and goals prescribed by the PMA. This includes objectives aimed at improving *Strategic Human Capital* to enhance communications, payroll processes, job identification, recruitment, and delivery of human resource functions electronically to satisfy the needs of management and employees; *Financial Management* to ensure up-to-date, easy-to-use, and centralized financial analysis tools for information management; *Physical Assets and Fleet Management* to ensure the accountability and condition of physical property, including

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buildings, equipment, and vehicles by providing systems that monitor and manage their location, condition, and maintenance.

***Strategic Objectives:***

- 3.1 Initiate and complete key phases of the Water Management Framework and Blueprint initiative and use the information to promote efficiencies in mission-and business-related practices and systems, including identifying opportunities for streamlining business practices and reducing system and process redundancies.
- 3.2 Ensure Reclamation IT and Mission/Business representatives are involved in enterprise-wide, E-Government, and cross-cutting initiatives aimed at achieving IT goals and goals prescribed by the PMA as well as Management Excellence. Identify opportunities to leverage these initiatives and improve business practices and IT systems and information sharing internally.
- 3.3 Implement an IT capital planning and investment control framework that integrates enterprise architecture principles and practices as well as initiatives endorsed by the Framework and/or Blueprint.

***Steps to Achieving Goal and Strategic Objectives:***

- Complete a Water Management Framework and launch the work necessary to complete Blueprint(s), involving key stakeholders across the organization and with the support of the Department.
- Communicate regularly with appropriate IT and mission/business partners responsible for or involved in the Framework and/or Blueprint, E-Government initiatives, lines of business/data advisory initiatives/committees, enterprise-wide projects, and ensure milestones are identified and understood. Ensure strategies or migration plans are in place to leverage these initiatives in support of Reclamation programs and operations.
- Establish an IT investment review process for Budget Year 2008 and out-years that integrates enterprise architecture principles and practices to rank and prioritize investments based on agreed-upon standards, which incorporate and address E-Government, lines of business, and enterprise architecture goals.

***Measures of Progress:***

- **Completion of Water Management Framework and Initial Blueprint -** Completion of Water Management Framework and at least one Blueprint will be used to gauge progress, including identifying any opportunities to improve or streamline business practices and/or achieve cost savings.
- **Completion of Enterprise Transition Plan With Regular Reports on Achieved Milestones-** Regular meetings and updates on the progress made in

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achieving milestones in the Department's soon-to-be completed Enterprise Transition Plan will be used to assess progress in cross-cutting areas. The milestones that relate to Reclamation will be tracked and the percentage of milestones achieved will be used to measure progress.

- **Utilization of EA Investment Assessment Tool** - Completion of an IRB/CIOC investment evaluation/rating tool or process that integrates enterprise architecture principles. Use the tool or process to identify and reject IT investments for the BY 2008 or BY 2009 cycle.

***Program Maturity<sup>2</sup> - Goal 4: Maintain an IT Program that fosters the maturity of organization-wide IT practices in the areas of security, enterprise architecture, capital planning and investment control, workforce development, and information and records management***

***Linkages to Other Goals:***

Goal (4) supports goals in the *Department's IT and Business Enterprise Plan* for E-Government and many of these goals are aimed at improving the efficiency and effectiveness of business processes and practices. This includes objectives to strengthen the effectiveness of IT security and investment management processes, which are aimed at improving the maturity level of organizational business practices within the areas of IT security, capital planning and investment control, IT workforce development, IT project management, records management, and architecture. The overriding objective is to improve business practices to further strengthen security over systems, investment decision-making capabilities, information management capabilities, and enhance compliance with common business standards and practices across the organization.

Within the Department's *E-Government Strategy*, Goal (4) supports efforts to improve IT governance and program management capabilities, including creating a management environment that fosters innovation and communication while establishing repeatable best practices for consistent IT capital planning, implementation, and operation; ensuring advanced security measures, such as electronic authentication, Internet security policies, and remote testing, are comprehensively developed, maintained, enforced and integrated in all aspects of E-Government applications for keeping information private and secure, as appropriate; and establishing a stable, reliable and robust technical infrastructure aligned with the architecture and capable of successfully supporting E-Government and other IT initiatives. Additionally, the goal supports corporate-level priorities to develop and implement consistent practices and operations to foster improvements across Reclamation and to better address stakeholder needs in a more consistent and uniform

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<sup>2</sup> Maturity is a term used to describe the extent to which an organization executes key practices and processes based on industry guidelines, best practices, and models within a field of practice, such as project management, enterprise architecture, and IT investment management. A higher maturity level is given to organizations that execute a greater number of key practices and processes.

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manner.

***Strategic Objectives:***

- 4.1 Develop action plans or strategies to ensure Reclamation's IT security, capital planning, and architecture efforts are based on repeatable best practices and maturity frameworks endorsed by the IT industry, Government Accountability Office, Federal CIO Council, as deemed appropriate. Update IT policies and directives and standards and guidance as needed.
- 4.2 Collaborate with Reclamation's Human Resources Division to ensure workforce planning and development issues identified as part of the Human Resources Line of Business and E-Government (Quicksilver) efforts underway at a government-wide level are being addressed and determine if these initiatives will impact Reclamation business processes or systems. Develop plans or updates to workforce plans as deemed appropriate and to ensure that IT competencies and skill gaps are identified and addressed across the organization.
- 4.3 Develop and maintain an IT Project Management capability to comply with federal and Department requirements for IT projects and investments, including life cycle guidance, project management guidance, and training guidance for staff.
- 4.4 Develop records and information management guidance as needed and ensure Reclamations guidance conforms to federal standards related records management, privacy, geospatial data and information sharing, and web site management (e.g., National Archives and Records Administration, OMB Circulars, and other geospatial and web site guidance) as well as DOI requirements in a timely manner. Increase user awareness of records management requirements and practices through outreach efforts and informational brochures and briefings. Also, develop techniques to make improvements in data integrity, business practices, data security, and data privacy while implementing guidance or requirements. Work and collaborate with appropriate DOI Teams, E-Government Teams, and system-level teams within Reclamation (e.g., RMSS, GIS, and others) to ensure standards are appropriate and applied as required.

***Steps to Achieving Goal and Strategic Objectives:***

- The CIO will identify repeatable best practices and maturity frameworks to apply within Reclamation and establish action plans as needed to implement best practices or achieve action plan milestones. IT policies and directives and standards will be reviewed and updated to address new requirements or gaps as needed.
- The CIO will work with Reclamation's HR office to identify key workforce development initiatives underway and develop and/or review plans and IT workforce training requirements associated with initiatives and to address bureau-wide IT training needs/gaps.



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- The CIO will refine IT Project Management guidance and identify tools that can assist IT project managers with documentation standards.
  - The CIO will develop a process to ensure its information and records management standards and guidance are in line with applicable DOI and NARA requirements and implement changes in a timely manner based on milestones established for federal agencies. In addition, the CIO will develop informational and promotional materials for users on records management issues and practices and conducting regular reviews of compliance with applicable records management requirements and guidelines.
  - The CIO will ensure information requests under the Freedom of Information Act (FOIA) are in line with applicable guidance established by the DOI and work to improve the quality and consistency of agency-level responses. In addition, the CIO will develop a framework to share data standards and privacy requirements and for integrating changes based on user input - including geospatial data.

***Measures of Progress:***

- **Utilization of Maturity Models to Improve the IT Program** - Completion of action plan tasks established to improve organizational maturity levels for capital planning, architecture, and security where appropriate. The Department has identified the maturity models that will be followed across the organization. In some cases, OMB has mandated use of the models. Otherwise, identify best practices and implement these practices when deemed appropriate.
- **Achievement of IT Workforce Training Goals** - Define and coordinate HR goals internally and with appropriate organizations to ensure IT workforce development issues are addressed and that PMA goals are achieved.
- **Development of Repeatable IT Project Management Practices** - Completion and utilization of an IT Project Management Handbook and the use of tools to assist Reclamation IT project managers with project management tasks, including but not limited, to web-enabled tools and examples of products that demonstrate handbook utilization and use by the project management community.
- **Utilization of Information/Records Management Guidance** - Completion of updated information and records management guidance and establishment of a process to assess FOIA responses to ensure consistency and quality, including statistics on briefings and attendance levels, training opportunities, and other outreach efforts to enhance user knowledge of records management requirements and processes, as well as reviews of compliance with applicable data management requirements and recommendations for improvements.

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***Mission Support/Alignment - Goal 5: Promote the adoption of IT systems and services that enable mission and business partners to attain strategic water resource management, hydropower, and financial management goals and objectives, including systems and services supporting dams and power and associated facilities; desalination processes; water and related conservation initiatives; land-related, environmental, and wildlife management measures; recreational services; and, financial and accounting services***

***Linkages to Other Goals:***

Goal (5) aligns with several of Reclamation's corporate-level priorities and *Water 2025* goals, including maintaining and modernizing existing water facilities so they will continue to provide water and power; enhancing opportunities for water conservation, use efficiency, and resource monitoring to allow existing water supplies to be used more effectively; improving water treatment technology, such as desalination, to help increase water supply; using collaborative approaches and market-based transfers to minimize conflicts; and, ensuring the existing water supply infrastructure can provide additional benefits for ongoing and emerging needs for water. Goal (5) also supports recommendations outlined in the National Academy of Sciences to better address infrastructure issues and costs.

***Strategic Objectives:***

- 5.1. Institute standard IT life cycle and project management practices to ensure that consistent and integrated approaches are used to initiate, evaluate, and recommend or terminate IT project proposals across Reclamation.
- 5.2. Collaborate with Reclamation regions, area offices, and mission and business organizations on developing electronic and state-of-the-art tools to share information on best practices associated with water, resources, and financial management functions.
- 5.3. Develop more effective outreach or survey tools to identify and evaluate the tools and systems or information needed by mission and business partners to perform their work more effectively and efficiently.

***Steps to Achieving Goal and Strategic Objectives:***

- The CIO will develop a proposal or issue paper for Reclamation leadership teams and councils to develop and employ a more consistent and integrated framework for initiating, evaluating, and recommending or terminating IT project proposals.
- The CIO will conduct outreach efforts to identify the system, tools, and support needed by mission and business organizations in Reclamation and on obtaining more information on best practices. This likely will involve collaboration with the Office of Program and Policy Services, as sponsor of Reclamation's Water Management Framework.
- Information resulting from surveys or informal feedback on best practices or other tools will be collected and shared with other Reclamation organizations via the

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CIO's web site.

***Measures of Progress:***

- **Utilization of a Common IT Investment Management Framework -** Completion of an issue paper or proposal for leadership teams and councils within Reclamation to employ a consistent process for initiating, evaluating, and recommending or terminating IT project proposals. Use the model as part of the IT investment review process for budget year 2008 or 2009.
- **Identification of Business Priorities -** Completion of at least one survey sponsored by the CIO or as part of the Water Management Framework to obtain information from mission and business organizations within Reclamation on information and technology requirements, including but not limited to more information on business priorities. Use information gathered from this effort to prioritize and rank IT investments.
- **Establishment of Outreach Efforts to Identify Business and Mission Priorities -** Creation of a survey tool or instrument to better capture and identify the technologies or services needed by mission and business partners/stakeholders. Work with mission and business organizations on strategies to provide the tools or resources (experts) to meet operational priorities and other work-related requirements, including supporting audit and financial requirements, providing IT acquisition and contracting advice and/or expertise, and supporting IT projects through project management or the employment of consistent IT practices. In the future, use survey tools to determine whether business and mission stakeholders collaborate with and rely on the IT program.

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## II - Challenges and Opportunities

Strategic planning often results in a number of challenges and opportunities for organizations. Strategic planning, while essential, often becomes a finite, annual exercise that results in a seldom discussed or referenced document. An ongoing challenge for both the Chief Information Office and CIOC will be to ensure that the necessary IT support is provided for core mission and business operations while simultaneously working on goals and strategic objectives in Reclamation's *IT and E-Government Strategic Plan*. Another challenge will be to keep the plan focused, given competing demands for resources and the ever-increasing number of requirements placed upon federal agencies and IT programs. Finally, a challenge will be to '*maintain the course*' when organizational, procedural, and cultural changes often occur in an incremental manner.

While challenges exist, a number of opportunities result from strategic planning. Strategic planning helps organizations provide a roadmap for managing programs, initiatives and projects. Reclamation's *IT and E-Government Strategic Plan* provides such a roadmap as well as an integrated framework for managing and achieving a wide array of IT goals and performance objectives established internally and externally. The Plan also helps ensure that Reclamation's IT Program is aligned with mission- and business-related goals established for the organization and by the Department. Additionally, the Plan provides a mechanism for the CIO and CIOC to disseminate information regarding Reclamation's IT Program and an opportunity to gain widespread support for goals, objectives, and performance measures across the organization and with external and water resource stakeholders. Finally, the Plan provides an opportunity for the Chief Information Office and CIOC to help move Reclamation's IT Program in the right direction and prepare the organization to meet future mission challenges.

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## **Appendix I - Understanding Information Technology and Electronic Government Requirements**

Strategic planning would be remiss if due consideration were not provided to the information technology-related laws, regulations, and instructions governing federal agencies and IT programs. The Congress and the Office of Management and Budget (OMB) have relied on legislation and regulations to ensure the proper acquisition, management, development, deployment, and oversight of information technology and related resources.

To illustrate, the Paperwork Reduction Act of 1995 and Information Technology Management Reform Act of 1996 were enacted to improve the way federal agencies acquire and manage technology. Federal agencies were granted authority and responsibility to make measurable improvements in mission performance and in the delivery of services through the strategic application of IT. The legislation also built upon requirements in the Government Performance and Results Act of 1993 and re-focused agency-level efforts on IT and the strategic management of IT-related resources.

Legislation, the Clinger-Cohen Act of 1996, also created positions for Chief Information Officers and gave these officials the visibility and management responsibilities necessary to be held accountable for IT programs and results, including:

- advising the agency head on technology-related matters,
- developing and implementing interoperable, secure, and shared systems and infrastructure capabilities,
- developing a trained and skilled IT workforce; and,
- developing IT procedures to standardize and improve business practices and reduce redundancies across the organization<sup>3</sup>.

The Clinger-Cohen Act of 1996 is perhaps the most widely known piece of legislation and provides key requirements for managing IT as an ongoing coordinated program within government. The Act not only mandated the establishment of defined duties and responsibilities for Chief Information Officers but required the implementation of capital planning and investment controls and established a requirements for IT strategic planning and performance management in these areas. OMB supplemented the Clinger-Cohen Act with implementing instructions - Executive Order 13011 and Circular A-130 - and required prompt implementation of provisions associated with the Clinger-Cohen Act. In 2000, Congress enacted the Electronic Signatures in Global National Commerce Act (ESIGN) and Government Information Security Reform Act (GISRA) to build upon some of these requirements and promote the use of electronic signatures and public key infrastructure (PKI) as well as the application of sound IT security practices within government.

By 2002, Congress reinforced earlier IT mandates and enacted the Electronic Government Act, which included Title III or the Federal Information Security

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<sup>3</sup>For more information, see the Office of Management and Budget, *Executive Order 13011*.

Management Act (FISMA), to encourage the use of web-based technologies and to provide for more citizen-centered IT services and improvements in IT security practices and performance across government. The E-Government Act also called for the development and deployment of various cross-cutting IT initiatives to foster transformation in functional areas, such as payroll processing, training, and personnel security screening practices, and to promote government to citizen, business, and government information sharing capabilities and other internal efficiencies across government. Initial cross-cutting initiatives launched as a result of the E-Government Act became known as *Quick-Silver* projects and 25 initiatives are now underway across government. Lead agencies have been assigned to manage initiatives and are responsible for the development and deployment of the necessary technology, with the financial assistance and involvement of other federal agencies. The Department of the Interior is currently the managing agency for two of the 25 initiatives. The following figure provides information on the 25 E-Government initiatives underway.

Figure: 25 E-Government Initiatives



Source: Department of the Interior, Information Technology and Business Enterprise Strategic Plan, June 2005, and the Office of Management and Budget's E-Government web-site - <http://www.whitehouse.gov/omb/egov/c-1-citizen.html>.



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In response to legislation, OMB issued Circular A-11 to improve IT investment controls and management practices as well as updated provisions in Circular A-130 to improve IT planning and security management practices across government. OMB continues to update guidance and implementing instructions related to these Circulars and on occasion, supplements guidance with memoranda or directives. For example and in 2004, the OMB, with input from the Department of Homeland Security and the Bush Administration, issued Homeland Security Presidential Directive 12 (HSPD 12) to address requirements in the E-Government Act and other legislation related to the adoption and use of smart card and electronic signature technology. HSPD 12 requires federal agencies to use smart cards as part of the credentialing process for federal employees and contractors and to use the technology to enhance security over government facilities and systems, with an over-arching goal of enabling information sharing and the use of electronic signatures through public key infrastructure (PKI) capabilities.

In addition to providing guidance, OMB uses other techniques to promote the adoption and implementation of IT goals and requirements identified by the President and other government-wide councils and industry groups. The OMB uses a scorecard system to assess federal agency progress in implementing mandates under the PMA. The PMA, while not exclusive to IT, provides annual performance goals for federal agencies to implement within key areas as well as metrics to gauge progress in addressing cross-cutting goals aimed at improving the effectiveness of government programs and operations, including E-Government. Annually, OMB uses the scorecard to evaluate the performance of federal agencies in the selected areas, with red (failing), yellow (marginal), green (passing), and blue (model or best practice) indicating performance scores. Federal agencies typically develop similar scorecard system to prompt action at the bureau and office levels and to ensure achievement of PMA performance and other metrics across the department or organization.

OMB also uses the Chief Information Officers' Council Federal Enterprise Architecture effort to promote IT goals and transformation within government. About 39 lines of business have been identified through the FEA and to promote the consolidation and integration of government services and programs for greater efficiencies and cost savings across government. Through this effort, all federal agencies have been tasked with developing an Enterprise Architecture to achieve alignment with the 39 lines of business and to improve service delivery in key areas. This includes developing repositories to manage models within the EA and blueprints to communicate information on future IT capabilities envisioned for the organization. To further promote this effort, OMB directed federal agencies to develop implementation and alignment plans to better ensure the achievement of lines of business and E-Government initiatives.

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## Appendix II - Understanding the Department of the Interior's Strategic, E-Government, Business Enterprise, and Information Technology Plans

The Department of the Interior relies on multiple plans to communicate and provide guidance on key strategic, IT, E-Government, and Business Enterprise goals and performance objectives across the organization. Central to the strategic planning process is the Department's *Strategic Plan for Fiscal Years 2003-2008*, which provides overarching goals for the entire organization, including the IT program. Specifically, the Plan includes a goal to '*Manage the organization to be highly skilled, accountable, modern, functionally integrated, citizen-centered, and results-oriented*'. End outcome goals and performance measures associated with this goal directly relate to the IT Program and may be updated by September 2006.

Since 2003, several supporting plans have been completed by the Department to reinforce goals in the *Strategic Plan* and to keep pace with ever changing IT and E-Government requirements. In 2004, Interior completed an *E-Government Strategy for Fiscal Years 2004-2008* to provide a framework for implementing E-Government goals across the Department. The *E-Government Strategy* identifies an approach for addressing Interior's four mission goals: *Resource Protection; Resource Use; Recreation, and Serving Communities*, and aligning E-Government goals within one framework. The Department's six E-Government goals include:

- Goal 1 – *Resource Protection* – Use technology to improve Interior's ability to protect the nation's natural, cultural, and heritage resources;
- Goal 2 – *Resource Use* – Use technology to improve Interior's ability to manage resources to promote responsible use and sustain a dynamic economy;
- Goal 3 – *Recreation* – use technology to improve Interior's ability to provide recreation opportunities for America;
- Goal 4 – *Serving Communities* – Use technology to improve Interior's ability to safeguard lives, resources, and property; advance scientific knowledge; fulfill trust responsibilities to Indian tribes and individuals; and improve the quality of life for the communities we serve;
- Goal 5 – *Management Support* – Employ E-Government solutions to achieve the Department's management excellence goals and the PMA; and,
- Goal 6 – *Organizational E-Government Capabilities* - Reinforce the underlying structures and processes necessary to successfully develop, implement, and operate E-Government solutions.

These six E-Government goals also include a number of sub-objectives to better ensure implementation and achievement of goals. To better identify the goals and objectives that pertain to Reclamation, selected goals and sub-objectives are provided. Specifically,

### *Goal 1 - Resource Protection*

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- Objective 1.2 – *Sustain Biological Communities* – Use technology to enhance Interior’s ability to sustain biological communities on DOI-managed and influenced lands and waters in a manner consistent with obligations regarding the allocation and use of water.
  - Objective 1.3 – *Protect Cultural and Natural Heritage Resources* - Use technology to enhance Interior’s ability to protect cultural and natural heritage resources.

#### *Goal 2 – Resource Use*

- Objective 2.1 – *Manage Resource Use* – Use technology to enhance Interior’s ability to manage or influence resource use to enhance public benefit, promote responsible use, and ensure optimal value.
- Objective 2.2 – *Deliver Water and Generate Hydropower* – Use technology to enhance Interior’s ability to deliver water and generate hydropower, consistent with applicable Federal and State law, in an environmentally responsible and cost efficient manner.

#### *Goal 3 – Recreation*

- Objective 3.1 – *Provide for quality Recreation Experience* – Use technology to enhance Interior’s ability to provide for a quality recreation experience, including access and enjoyment of natural and cultural resources on DOI-managed and – partnered lands and waters.
- Objective 3.2 – *Provide for Fair Value* – Use technology to enhance Interior’s ability to provide for and receive fair-value in recreation.

#### *Goal 4 – Serving Communities*

- Objective 4.1 - *Protect Lives, Resources, and Property* – Use technology to improve Interior’s ability to protect lives, resources, and property.
- Objective 4.2 – *Advance Knowledge Through Scientific Leadership* – Use technology to improve Interior’s ability to advance knowledge through scientific leadership and inform decisions through the applications of science.

#### *Goal 5 – Management Support (These areas correspond to PMA goals)*

- Objective 5.1 – *Strategic Human Capital* – Improve communication, payroll processes, job identification, recruitment, and delivery of human resource functions electronically to satisfy the needs of management and employees.
- Objective 5.2 – *Financial Management* - Ensure up-to-date, easy-to-use, and centralized financial analysis tools and information for Interior’s management and employees.
- Objective 5.3 – *Physical Assets and Fleet Management* – Improve the accountability and condition of physical property, including buildings, equipment, and vehicles by providing systems that monitor and manage their location, condition, and maintenance.
- Objective 5.4 – *Performance Measurement and Decision-Making* – Improve resources allocation and operating efficiencies by providing electronic capabilities to evaluate and monitor program performance.

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- Objective 5.5 – *Information Management and Workflow* - Improve operating efficiencies and effectiveness through internal information sharing and collaboration using data management, electronic records management, and workflow tools.
  - Objective 5.6 – *Geospatial Information Management* – Improve methods for tracking and incorporating geospatial information in all Interior business solutions.

*Goal 6 – Organizational E-Government Capabilities*

- Objective 6.1 - *Governance and Program Management* – Create a management environment that fosters innovation and communication while establishing repeatable best practices for consistent IT capital planning, implementation, and operation.
- Objective 6.2 – *Web Presence* - Provide an easy to access, consistent, useful, and accurate web presence for Interior.
- Objective 6.3 – *Privacy and Security* - Ensure that advanced security measures, including electronic authentication, Internet security policies, and remote testing, are comprehensively developed, maintained, enforced and integrated in all aspects of E-Government applications for keeping information private and secure as appropriate.
- Objective 6.4 – *Technical Infrastructure* – Ensure a stable, reliable and robust technical infrastructure aligned with the architecture and capable of successfully supporting E-Government initiatives.

While the E-Government Strategy document provides more insight on IT-related goals and objectives, the *IT and Business Enterprise Strategic Plan* provides a tactical framework for addressing and achieving overarching IT goals in the Department's *Strategic Plan* and *E-Government Strategy* document. Key focus areas and goals within the *IT and Business Enterprise Strategic Plan* include:

- *Goal (1) Enterprise Architecture – Leverage EA to improve Interior's mission performance and realize strategic goals and objectives*
- *Goal (2) Security – To protect the availability, confidentiality, and integrity of DOI information technology resources*
- *Goal (3) E-Government – Improve the efficiency and effectiveness of DOI business processes*
- *Goal (4) Capital Investment Planning – Improve the planning, execution, and management of IT investments*
- *Goal (5) Enterprise/Operations – Provide enterprise-based operations that improve the quality, access, and sharing of data*
- *Goal (6) Records Management – Create and safeguard records cost effectively and apply retention schedules according to federal regulations and system-enforced rules*
- *Goal (7) Workforce Development – Ensure IT human capital is sufficient and capable to meet our IT goals and DOI mission objectives.*

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The *IT and Business Enterprise Strategic Plan* also provides for a range of milestones and targets to ensure implementation and achievement of goals and performance objectives. To obtain more information regarding these documents, see (insert link)

In September 2005, the Department completed an *Information Technology Strategic Plan Update*. The *Update* provides a more focused look at IT strategic principles and goals within several key focus areas, including

- Enterprise Architecture,
- Information Security,
- E-Government,
- Capital Planning,
- Enterprise Operations,
- Knowledge Management, and
- Skilled Workforce.

The *Update*, unlike previous plans and strategy documents, provides a very concise framework of the Department's IT Program and strategic goals. Information is provided in roughly 20-pages and effort was made to integrate other strategic plans and strategies into the *Update*. Goals also have been limited to 3 to 5 key goals and both near-and long-term goals are identified.

Finally, the Department plans to complete an Enterprise Transition Plan by March 2006. The Plan will provide information on E-Government, Lines of Business initiatives, major IT investments, and blueprints (enterprise architecture) underway. The Enterprise Transition Plan, as envisioned, will become more of an integrated project plan for the Department and identify key milestones associated with these various efforts and the interdependencies of milestones. Quarterly reports regarding the Department's implementation and achievement of milestones identified in the Plan will be tracked by the OMB.

## Appendix III - Quick-Look Reclamation's IT Portfolio, Budget Year 2008

IT Investment	Primary Linkage to DOI Strategic Goal	Linkage to CIO Program Goals
Accessibility Data Management System (ADMS)	<b>Recreation</b> - Provide for a quality recreation experience, including access and fair value	Mission Support/Alignment
Bureau of Reclamation Computer Aided Design (BORCAD)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Bureau of Reclamation Geographic Information System (BORGIS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Bureau of Reclamation Hydrological and Meteorological Information System (BORHMIS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Bureau of Reclamation Safety and Security Information System (BORSSIS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Bureau of Reclamation Water Management Information System (BORWMIS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Bureau of Reclamation Water Operations and Record Keeping System (BORWORKS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Corporate Data Warehouse (CDW)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment Performance Management
Colorado River Storage Project Supervisory Control and Data Acquisition System (CRSP SCADA)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Central Valley Automated Control System (CVACS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Central Valley Operations Decision Support System (CVODSS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Federal Standard Requisitioning and Issue Procedures (FEDSTRIP)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Foundation Information for Real Property Management (FIRM)	<b>Resource Protection</b> - Watersheds, landscapes, and marine resources	Mission Support/Alignment



IT Investment	Linkage to Primary DOI Strategic Goal	Linkage to CIO Program Goals
Grand Coulee Power Office Supervisory Control and Data Acquisition System (GCPO SCADA)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Great Plains Region Supervisory Control and Data Acquisition Systems (GP SCADAS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Hoover Supervisory Control and Data Acquisition System (HSCADA)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Lower Colorado Region Supervisory Control and Data Acquisition Systems (LC SCADAS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Movable Property System (MPS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Mid-Pacific Region Supervisory Control and Data Acquisition Systems (MP SCADAS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Northern California Area Office Backup Supervisory Control and Data Acquisition System (NCAO Backup SCADA)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Program and Budget System (PABS)	<b>Accountability</b> - Improved Financial Performance	Performance Management
Pacific Northwest Region Supervisory Control and Data Acquisition Systems (PN SCADAS )	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Proposal and Performance Contract Management System (Prop C)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Reclamation Perimeter and Backbone Wide Area Network (RecNet)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment Infrastructure Support
Reclamation electronic Document System (REDS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment Information Management
Reclamation Mission Support System (RMSS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment Infrastructure Support
Safety, Security and Law Enforcement Classified (SSLE CL)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Time and Attendance System (TAAS)	<b>Accountability</b> - Improved Financial Performance	Performance Management
Technical Service Center Engineering Support System (TSCCESS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment
Technical Service Center Management Information System (TSCMIS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment Performance Management
Upper Colorado Region Supervisory Control and Data Acquisition Systems (UC SCADAS)	<b>Resource Use</b> - Manage resources to promote responsible use and optimal value	Mission Support/Alignment

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## **Appendix IV – Key Information Technology Legislation and Regulatory Guidance**

The primary legislation that provides guidance on the usage of IT resources includes, but is not limited to the following:

- **Section 508 of the Rehabilitation Act of 1973**
- **Privacy Act of 1974**
- **Computer Security Act of 1987**
- **Government Paperwork Elimination Act of October 1988**
- **Chief Financial Officers Act of 1990**
- **Government Performance and Results Act of August 1993**
- **Executive Order 12906 - Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure, April 1994**
- **Federal Acquisition Streamlining Act of October 1994**
- **Clinger-Cohen Act of February 1996**
- **Electronic Freedom of Information Act Amendments of February 1998**
- **Critical Infrastructure Protection Plan (Presidential Decision Directive 63) of May 1998**
- **Public Law 106-107 of November 1999**
- **Electronic Signatures in Global National Commerce Act of August 2000**
- **Government Information Security Reform Act of October 2000**
- **Federal Records Act (36 CFR 1220) of May 2002**
- **OMB Circular A-16 of August 2002 (Revised)**
- **E-Government Act of 2002**
- **Federal Information Security Management Act of 2002 (FISMA)**
- **OMB Circular A-11 of July 2003**
- **Management of Information Resources (OMB Circular A-130) of 2004**
- **Homeland Security Presidential Directive 12 of 2004**

As amended, **Section 508 of the Rehabilitation Act of 1973** requires federal agencies to ensure that their electronic and information technologies provide people with disabilities access to information and data comparable to that of people without disabilities. This requirement applies to federal as well as members of the general public that conduct business with the agency. Additional guidance regarding this Act and its implications for electronic government has been issued by the interagency CIO Council and the Department of Justice.

The **Privacy Act of 1974** provides specific guidance to federal agencies on the control and release of appropriate records.

The **Computer Security Act of 1987** provides for the security of Government information systems. The Act requires each agency with a federal computer system to

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establish a security plan to protect the security and privacy of sensitive information. In addition, the Act establishes a Computer System Security and Privacy Advisory Board within the Department of Commerce and directs the National Bureau of Standards to establish a computer standards program for federal computer systems. The Act also requires that agencies provide periodic training for their employees on the management, use, and operation of computer systems.

The **Government Paperwork Elimination Act of October 1988 (GPEA)** specifically provides for Federal agencies, by October 21, 2003, to give the public the option to submit information electronically; to maintain or disclose information to the public using electronic means; and to use electronic authentication methods to verify the identity of the sender and the integrity of electronic content. The law directs agencies to engage in the “acquisition and use of information technology, including alternative information technologies that provide for electronic submission, maintenance, or disclosure of information as a substitute for paper, and for the use and acceptance of electronic signatures.”

The **Chief Financial Officers Act of 1990** brought more effective general and financial management practices to the Federal Government through statutory provisions that established in the Office of Management and Budget a Deputy Director for Management, established an Office of Federal Financial Management headed by a Controller, and designated a Chief Financial Officer in each executive department and in each major executive agency in the Federal Government. The Act provided for improvement, in each agency, of systems of accounting, financial management, and internal controls to assure the issuance of reliable financial information and to deter fraud, waste, and abuse of Government resources.

The Act also provided for the production of complete, reliable, timely and consistent financial information for use by the executive branch of the Government and the Congress in the financing, management, and evaluation of Federal Programs.

The **Government Performance and Results Act of August 1993 (GPRA)** requires government agencies to link performance to results and fosters short-term business planning and long-term strategic planning. The law also requires that agencies develop performance plans that articulate their target performance goals and progress towards meeting these goals. Electronic government is a means by which agencies can fulfill these performance goals. The Act also encourages bureaus and offices within agencies, such as CIO and IT organizations, to improve service delivery and focus on results and customer satisfaction.

The **Executive Order 12906 - Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure (April 1994)** established geographic information as a critical element in promoting economic development and improving nationwide stewardship over natural resources and the environment. It also established the need to standardize geospatial data and to coordinate federal, state, local, and tribal government geospatial initiatives through a Federal Geographic Data Committee, which

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was established by the OMB under Circular A-16.

The **Federal Acquisition Streamlining Act of October 1994 (FASA)** established the Federal Acquisition Computer Network and increased agencies' flexibility in terms of procurement processes. Acquisitions are governed by the OMB's Office of Federal Procurement Policy. This Act, and subsequent amendments and directives found in the Federal Acquisitions Regulation (FAR), provides the legislative impetus for electronic procurement. OMB will continue to advance the evolution of agencies' acquisition processes from paper to electronic media to save taxpayer dollars, expedite processes, and ease the burden on businesses.

The **Clinger-Cohen Act of February 1996** facilitates, encourages, and provides for the efficient and effective use of modern information technology by executive agencies. The Act seeks to increase the responsibility and accountability of departments and agencies in achieving substantial improvements in the delivery of services to the public and in other program activities through the use of modern information technology. Formerly known as the Information Technology Management Reform Act, this law specifically mandates that agencies and departments:

- Establish Chief Information Officers (CIOs) with defined duties and responsibilities;
- Design and implement capital planning and investment controls; and
- Use information technology as a strategic enabler of agency and departmental missions and business objectives, implementing information technology-related actions to enhance performance and results-based management.

The **Electronic Freedom of Information Act Amendments of February 1998** created a specific procedure through which any person can exercise his or general right to request and obtain access to particular federal agency records and data.

Commonly called "E-FOIA," the Act has increased demand for publications and reports from agencies, leading many agencies to allow their publications and reports to be electronically downloaded from their Web sites.

The **Critical Infrastructure Protection Plan (Presidential Decision Directive 63) of May 1998** states that certain national infrastructures, e.g., energy, information and communications, and banking and finance, are critical to the national and economic security of the United States and the well-being of its citizenry, and that the United States will take all necessary measures to protect them. The Directive calls for a public-private partnership to provide protection, establishes a national organizational structure to effect that partnership, and directs the development of two sets of plans: each Federal department's or agency's plan to protect its portion of the Federal Government Critical Infrastructure and a comprehensive National Infrastructure Assurance Plan with input from all infrastructure sectors.

**Public Law 106-107 of November 1999** The Federal Financial Assistance Management Improvement Act of 1999 (P.L. 106-107) covers all domestic "federal financial

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assistance” programs. This encompasses all programs, including entitlements that provide resources (e.g., grants, contracts, loans, in-kind contributions) to states, localities, organizations, or individuals. Since it is limited to domestic programs, it does not cover foreign aid or assistance used in non-domestic situations.

The law requires OMB to work with other federal agencies to establish, when consistent with existing law:

- A uniform application for financial assistance (e.g., grant applications) from multiple programs across multiple federal agencies;
- Ways to simplify reporting requirements and administrative procedures, including uniformity and standardization of rules affecting funding from multiple programs;
- Electronic methods for applying for, managing, and reporting of financial assistance funds;
- Improved approaches for the collection and sharing of data pertaining to financial assistance programs, and efforts to strengthen the information management capacity of state, local, and tribal government and nonprofit organizations. This includes the development of a release form to be used by grantees for the sharing of information across multiple federal financial assistance programs. Presumably, the data sharing requirements could include a wide range of information, from program performance data to information about people receiving services (e.g., clients); and
- Specific annual goals and objectives to achieve these items.

**Electronic Signatures in Global National Commerce Act of August 2000 (ESIGN)** declares the validity of electronic signatures for interstate and international commerce; prohibits denying the legal effect of certain electronic documents and transactions signed by an electronic signature; clarifies broad circumstances in which an electronic record satisfies any statute or regulation that mandates a record in writing; requires inquiries into domestic and foreign impediments to commerce in electronic signature products and services; and embraces all technologies. The Act is also known as the “Millennium Digital Commerce Act” and the “ESIGN bill.”

The **Government Information Security Reform Act of October 2000 (GISRA)** requires Federal Agencies to assess the security of their non-classified information systems. More important from an enforcement perspective, the law requires every agency to provide a risk assessment and report of the security needs of its systems. These reports must be included in every agency budget request. All agency programs will include procedures for detecting, reporting and responding to security incidents, including notifying and consulting with law enforcement officials, other offices and authorities, and the General Services Administration’s Federal Computer Incident Response Capability (FedCIRC).

The **Federal Records Act (36 CFR 1220) of May 2002**, defines federal records and requires the establishment of agency programs to ensure adequate and proper documentation of organization, function, policies, decision, procedures, and essential transactions.

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The **OMB Circular Number A-16 of August 2002 (Revised)** provided direction for federal agencies that produce, maintain or use spatial data either directly or indirectly in fulfillment of their mission. It established a coordinated approach to electronically develop the National Spatial Data Infrastructure and to further manage the Federal Geographic Data Committee (FGDC), which was originally established in 1990. It prescribed that data themes, metadata, the National Spatial Data Clearinghouse, standards, and partnerships be established. The Circular also defined agency-level responsibilities and reporting requirements, including responsibilities and requirements for bureaus and offices within the Department of the Interior.

The **E-Government Act of 2002** is defined as the Government use of web-based Internet applications or other information technology to enhance the access to and delivery of government information and services to the public, other agencies, and other Government entities; or to bring about improvements in Government operations that may include effectiveness, efficiency, service quality, or transformation. The Act establishes a new agency within the Office of Management and Budget, the Office of Electronic Government, which is responsible for electronic information management and for promoting interagency cooperation to improve public services.

The **Federal Information Security Management Act of 2002 (FISMA)** is Title III of the E-Government Act of 2002. FISMA provided a comprehensive framework for ensuring the effectiveness of information security controls over information resources that support Federal operations and assets. It recognized the highly networked nature of the current Federal computing environment and provided effective government-wide management and oversight of the related information security risks, including the coordination of information security efforts throughout the civilian, national security and law enforcement communities.

FISMA provided a mechanism for improved oversight of Federal agency information security programs. It acknowledged that commercially developed information security products offer advanced, dynamic, robust and effective information security solutions, reflecting market solutions for the protection of critical information infrastructures important to the national defense and economic security of the nation that are designed, built, and operated by the private sector.

The Act recognized that the selection of specific technical hardware and software information security solutions should be left to individual agencies from among commercially developed products.

The **OMB Circular A-11 of July 2003** discusses planning, budgeting, and acquisition of capital assets; describes requirements of GPRA and how to prepare and submit strategic plans and performance plans; and provides a basic set of performance measures on the management of physical and financial assets.

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The **Management of Information Resources (OMB Circular A-130) of 2004** was revised on April 16, 2004, the OMB Circular A-130 established policy for the management of Federal information resources that apply to the information activities of all agencies of the executive branch of the Federal government, including procedural and analytical guidelines for implementing specific aspects of these policies. The circular requires that agencies develop and maintain an IT strategic plan that supports the agency strategic plan. The IT strategic plan is required to provide a description of how IT helps accomplish agency missions and how IT decisions are integrated with organization planning, budget, procurement, financial management, human resources management, and program decisions.

The **Homeland Security Presidential Directive 12 of 2004** (HSPD-12) establishes policy to enhance security, increase Government efficiency, reduce identity fraud, and protect personal privacy by establishing a mandatory, Government-wide standard for secure and reliable forms of identification issued by the Federal Government to its employees and contractors (including contractor employees).

## **Appendix V - IT Strategic Planning Governance Structure**

<b>Activity</b>	<b>Responsible</b>	<b>Accountable</b>	<b>Consulted</b>	<b>Informed</b>
<b>Define Strategy</b>	CIO	CIO	CIOC/CFO/CFOC/ RLT/ DOI ITMC/E- Government Team	RLT/ DOI ITMC/DOI E- Government Team
<b>Identify Gaps and Redundancies in Accomplishing Strategy</b>	CIOC/CIO	CIOC/CIO	CFO/CFOC/ RLT/ DOI ITMC/DOI E- Government Team	RLT/ DOI ITMC DOI E- Government Team
<b>Determine E-Government Opportunities and Priorities</b>	CIOC /CIO	CIOC/CIO	DOI ITMC/E- Government Team	DOI ITMC/E- Government Team
<b>Approve and Prioritize IT Investments</b>	CIOC/CIO	CIO/RLT	BRC/RLT/DOI ITMC	DOI ITMC/ DOI E- Government Team
<b>Evaluate IT Investments - Progress Against Performance Measures</b>	CIOC/CIO	CIOC/CIO	DOI ITMC/E- Government Team	DOI ITMC/ DOI E- Government Team
<b>Establish Consistent Communication and Provide Feedback as Deemed Appropriate</b>	CIOC/CIO	CIOC/CIO	DOI ITMC/E- Government Team	DOI ITMC/ DOI E- Government Team
<b>Refine Strategy, goals, objectives, and performance measures</b>	CIOC/CIO	CIOC/CIO	CIO/CFO/CFOC/ RLT/ DOI ITMC	RLT/ DOI ITMC / DOI E- Government Team

### Acronyms -

BRC – Budget Review Committee (Reclamation)

CIO - Chief Information Officer (Reclamation)

CIOC - Chief Information Officer's Council (Reclamation)

CFO- Chief Financial Officer (Reclamation)

CFOC – Chief Financial Officer's Council (Reclamation)

DOI ITMC – Department of the Interior (DOI) Information Technology (IT)

Management Council (Investment Review Board)

DOI E-Government Team

RLT – Reclamation Leadership Team



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